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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/528,229

03/18/2005

Daisuke Itoh

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05/20/2009

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EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

05/20/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,229	<b>Applicant(s)</b> ITOH ET AL.	
	<b>Examiner</b> ELLEN S. WOOD	<b>Art Unit</b> 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/22/2009; 02/17/2009</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Applicant's arguments, filed 02/17/2009, with respect to claims 1-12 have been fully considered and are persuasive. The rejection of claims 1-12 under 35 U.S.C. 103(a) as being unpatentable over Mitsuhiro et al. (EP0825221) has been withdrawn.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-7 and 9-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification states that recurring unit of glycolic acid polymer represented by formula (1) may be at least 60 wt.%, preferably at least 70 wt.%, more preferably at least 80 wt.% (pg. 8 lines 1-6). Thus, the specification does not provide proper antecedent basis for "said crystalline aliphatic polyester comprises glycolic acid homopolymer or a copolymer of at least 90 wt% of glycolide". Claims 2-7 and 9-12 are rejected as being dependents from the independent claim 1.

### ***Claim Rejections - 35 USC § 102***

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Shiiki et al. (EP0925915, hereinafter "Shiiki").

In regards to claims 1-7, Shiiki discloses a gas barrier multi-layer hollow container with a polyglycolic acid layer [0028]. The polyglycolic acid useful is a polymer containing a repeating unit represented by the following formula (1):



This is the formula of the instant applicant's recurring unit of the glycolic acid polymer (pg. 7 lines 19-23). The proportion of the repeating unit represent by the formula (1) in the polymer is generally at least 60 wt.%, preferably at least 70 wt%, more preferably at least 80 wt.% [0029]. The aliphatic polyester can also be comprised of 98 wt% of glycolide and 2 wt% lactide [0066 and table 1].

Shiiki discloses that when the T<sub>m</sub> of the polyglycolic acid is lowered, the processing temperature of the polymer can be lowered [0031]. Therefore, thermal decomposition upon melt processing can be reduced [0031]. The crystallization rate of the polyglycolic acid can also be controlled by copolymerization to improve its extrudability and stretchability. The blow molding process to make the hollow container

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includes a stretch blow molding process [0052]. Thus, the container has a layer that is a stretched product of crystalline aliphatic polyester.

Although the prior art does not disclose that the aliphatic polyester has a crystal melting point higher by at least 3<sup>0</sup>C and 5<sup>0</sup>C than that of an un-stretched product, the sub-dispersion peak temperature, the main dispersion peak temperature and the orientation degree the claimed properties are deemed to be inherent to the structure in the prior art since the Shiiki reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicants to prove otherwise.

In regards to claims 9, Shiiki discloses that the aliphatic polyester layer is comprised of a glycolic acid homopolymer [0065 and table 1].

In regards to claim 10, Shiiki discloses that the multi-layer hollow container has a layer of polyglycolic acid [0013], thus the polyglycolic acid is in the form of a film.

In regards to claim 11, Shiiki discloses that the polyglycolic acid is a layer of a hollow container [0013], thus in the form a bottle.

In regards to claim 12, Shiiki discloses that various thermoplastic resin layers (polymer layer) may be laminated to the polyglycolic acid layer [0019-0020].

### ***Response to Arguments***

6. Applicant's arguments, filed 02/17/2009, with respect to the rejection(s) of claim(s) 1-12 under 35 U.S.C 103(a) as being unpatentable over Mitsuhiro et al.

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(EP0825221) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly cited prior reference.

7. Claim 8 has been cancelled.

8. The applicant filed a "Supplement to Information Disclosure Statement" on 02/17/2009. The supplement refers to the IDS filed 12/22/2008 and discusses the eight references cited in that IDS. However, the IDS dated on 12/22/2008 only references three foreign patent documents.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rena L. Dye/  
Supervisory Patent Examiner, Art Unit 1794